



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/788,367 | 02/21/2001 | Seiji Nishiwaki | 33216M066 | 5450 |

7590 04/23/2004

Beveridge, DeGrandi, Weilacher & Young, L.L.P.
Suite 800
1850 M. Street, N.W.
Washington, DC 20036

| |
|----------|
| EXAMINER |
|----------|

HUBER, PAUL W

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2653

DATE MAILED: 04/23/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,367

Applicant(s)

NISHIWAKI

Examiner

Paul Huber

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 10-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2653

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Applicant's election of Figure 3, claims 1-9, in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakane (USP-6,324,139).

Nakane discloses an optical disk device (see figures 4 & 36, for example), comprising: a light source 101 which emits light; and light converging means 111 for converging the light from the light source 101 onto a signal surface of an optical disk 106 with selectively positioning a signal mark at any one of plural positions which are arranged in a direction that is substantially perpendicular to tracks. With respect to recording a signal mark on a track, as shown in figure 36, "it is possible to use the small-diameter condensing spot with respect to the high recording density medium, and use the large-diameter condensing spot with respect to the low recording medium" (col. 22, lines 36-40). As further illustrated with reference to figure 36, each track or 'signal mark forming region' as claimed, is surrounded by two "boarder" areas. Thus, each of the signal mark forming regions is surrounded by adjacent two of boarder lines or areas which are between two tracks on the signal surface of the optical disk 106, and which are substantially parallel to the tracks, as claimed. Each of the boarder lines or areas substantially divides an area between adjacent tracks in two parts as claimed.

Regarding claim 2, the light converging means includes: a converging lens 102 which converts light from the light source 101 into substantially parallel light; and light deflecting means 111 of receiving the substantially

Art Unit: 2653

parallel light, and arbitrarily emitting the substantially parallel light so that the light which is to be converged onto the optical disk is converged onto the disk with being displaced by a predetermined degree in the direction that is substantially perpendicular to the track, or without being substantially displaced.

Regarding claim 3, Nakane discloses in reference to figure 36 and in col. 21, lines 6-17, that the device includes controlling means for moving the light in the substantially perpendicular direction and adjusting the amount of the light, thereby erasing a signal mark which is already formed on the track as claimed.

Regarding claim 4, since the light spot during the erasing function of figure 36 is not symmetrical, the device is considered to unevenly move the light in the direction that is substantially perpendicular to the track as claimed. The uneven erasing light spot produces a region at the upper and lower sections of the light spot in which a time period when the converged light exists is short, and produces a region at the center section of the light spot in which a time period when the converged light exists is long, as claimed.


Regarding claim 5, the light defecting means 111 is configured by a crystal plate having an electrooptic effect; and electrodes which are formed on a surface and rear face of the crystal plate as claimed. See col. 17, line 52, through col. 18, line 50.

Regarding claim 8, the light converging means performs the light convergence so that, as the signal mark is shorter or smaller, i.e., in a high recording density medium, a degree of deviating a portion between the beginning and end of the signal mark is made larger, i.e., the degree of deviation or convergence is increased to make the beam spot smaller.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morimoto et al discloses a light converging means used in an optical disk device. Fukada discloses an optical disk recording/reproducing device.

Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Paul Huber at telephone number 703-308-1549.


Paul Huber
Primary Examiner
Art Unit 2653